Climate Change and Human Health Literature Portal



Health effects of coastal storms and flooding in urban areas: A review and vulnerability assessment

Author(s): Lane K, Charles-Guzman K, Wheeler K, Abid Z, Graber N, Matte T

Year: 2013

Journal: Journal of Environmental and Public Health. 2013: 913064

Abstract:

Coastal storms can take a devastating toll on the public's health. Urban areas like New York City (NYC) may be particularly at risk, given their dense population, reliance on transportation, energy infrastructure that is vulnerable to flood damage, and high-rise residential housing, which may be hard-hit by power and utility outages. Climate change will exacerbate these risks in the coming decades. Sea levels are rising due to global warming, which will intensify storm surge. These projections make preparing for the health impacts of storms even more important. We conducted a broad review of the health impacts of US coastal storms to inform climate adaptation planning efforts, with a focus on outcomes relevant to NYC and urban coastal areas, and incorporated some lessons learned from recent experience with Superstorm Sandy. Based on the literature, indicators of health vulnerability were selected and mapped within NYC neighborhoods. Preparing for the broad range of anticipated effects of coastal storms and floods may help reduce the public health burden from these events.

Source: http://dx.doi.org/10.1155/2013/913064

Resource Description

Exposure: M

weather or climate related pathway by which climate change affects health

Extreme Weather Event, Food/Water Quality, Human Conflict/Displacement

Extreme Weather Event: Flooding, Hurricanes/Cyclones

Food/Water Quality: Pathogen

Geographic Feature: M

resource focuses on specific type of geography

Urban

Geographic Location: M

resource focuses on specific location

United States

Health Impact: M

Climate Change and Human Health Literature Portal

specification of health effect or disease related to climate change exposure

Infectious Disease, Injury, Mental Health/Stress

Infectious Disease: Foodborne/Waterborne Disease

Foodborne/Waterborne Disease: General Foodborne/Waterborne Disease

Mental Health Effect/Stress: Stress Disorder

mitigation or adaptation strategy is a focus of resource

Adaptation

Population of Concern: A focus of content

Population of Concern:

populations at particular risk or vulnerability to climate change impacts

Children, Elderly, Low Socioeconomic Status

Resource Type: M

format or standard characteristic of resource

Review

Resilience: M

capacity of an individual, community, or institution to dynamically and effectively respond or adapt to shifting climate impact circumstances while continuing to function

A focus of content

Timescale: M

time period studied

Time Scale Unspecified

Vulnerability/Impact Assessment:

■

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content